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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,095	03/01/2002	Masaru Miura	111868	7214

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EXAMINER

MACKEY, JAMES P

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,095

Applicant(s)

MIURA ET AL.

Examiner

James Mackey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Claim 1 is objected to because of the following informalities: in claim 1, line 14, "a plurality of distance piece" should be plural. Appropriate correction is required.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Beres et al. (U.S. Patent 4,035,119).

Beres et al. '119 teach a tire mold comprising a pair of side mold members 12, 14 axially movable toward and away from each other and each having an inner peripheral surface provided with ridges 18 which extend in parallel with each other (as can be seen by comparing Figures 1 and 2) and which may extend along a meridian of the tire or helically about the tire axis (see column 1, lines 6-10); and a plurality of distance pieces 50 arranged axially between the side mold members and movable radially of the mold, the distance pieces being circumferentially combined with each other when they are moved radially inwards to form an annular inner peripheral surface 42 provided with at least one ridge.

4. Claims 1, 3 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Beres et al. (U.S. Patent 5,190,767).

Beres et al. '767 teach a tire mold comprising a pair of side mold members 12, 14 axially movable toward and away from each other and having an inner peripheral surface provided with ridges (at 18) which extend in parallel with each other along a meridian of the tire (as can be seen by comparing Figure 2 with Figures 1 and 3); a plurality of distance pieces 20 arranged

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axially between the side mold members and movable radially of the mold (see especially col. 3, lines 39-42), the distance pieces being circumferentially combined with each other when they are moved radially inwards to form an annular inner peripheral surface provided with at least one ridge; a cam surface 34 on upper side mold member 12 engaged by the distance pieces so that the distance pieces are moved radially inwards when the upper side mold member is moved axially toward the lower side mold member 14 (col. 3, lines 15-25); and the lower side mold member including biasing means 48 for biasing the distance pieces radially outward, and guide means 22, 24 for guiding the radial movement of the distance pieces.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Beres et al. (U.S. Patent 4,035,119) or Beres et al. (U.S. Patent 5,190,767), in view of Schaevitz (U.S. Patent 2,333,588).

Beres et al. '119 and Beres et al. '767 each disclose the tire mold substantially as claimed, except for the central ridge of the distance pieces extending in a circumferential direction of the mold. Schaevitz discloses a tire mold including side mold members 1, 3 having inner peripheral surfaces provided with ridges, and a central mold ring 25 arranged axially between the side mold members and having an annular inner peripheral surface provided with a circumferential ridge. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify either Beres et al. '119 or Beres et al. '767 by providing the ridge in the central annular mold member as a circumferential ridge, as disclosed in Schaevitz, in order to form a circumferential groove in the center region of the tread portion of the molded tire, as is conventional in the art.

8. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not teach or fairly suggest a vulcanizing mold including a pair of side mold members having inner peripheral surfaces provided with ridges extending in parallel with each other, a plurality of distance pieces arranged axially between the side mold members and movable radially of the mold and forming in combination with each other an annular inner peripheral surface provided with at least one ridge, and guide means for guiding the movement of the side mold members away from each other when opening the mold and positioning the side mold members relative to each other when closing the mold, as claimed in claim 5.

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lagnier et al. (U.S. Patent 6,408,910; Figure 10) discloses a tire mold having a pair of side mold members 201, 202 having inner peripheral surfaces provided with ridges or "elements in relief" 214, 215, and a plurality of distance pieces 203 arranged axially between the side mold members and movable radially of the mold and forming in combination with each other an annular inner peripheral surface provided with at least one ridge 216, but does not suggest providing the ridges of the side mold members extending in parallel with each other.

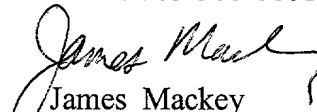
Balle (U.S. Patent 3,082,480) discloses a tire mold having side mold members including ridges, and a radially movable segmented tread mold.

Japan 4-319410 teaches a tire mold having a pair of side mold members including parallel ridges 22, 68 extending along a meridian of the tire (note especially Figure 1).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Mackey whose telephone number is 703-308-1195. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 703-308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


James Mackey
Primary Examiner
Art Unit 1722

9/27/03

jpm
September 27, 2003